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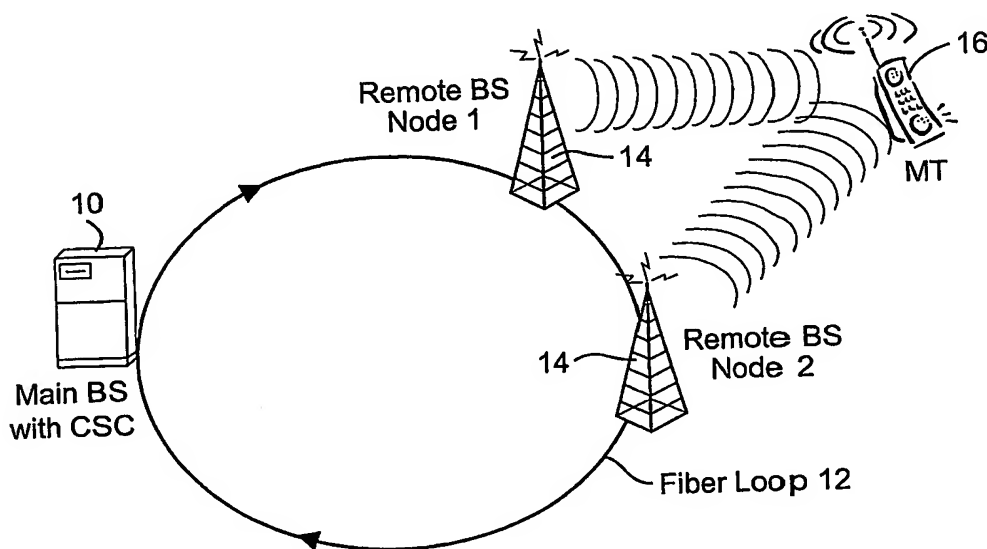
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[Continued on next page]

(54) Title: TEMPERATURE COMPENSATION FOR TRANSMISSION BETWEEN NODES COUPLED BY A UNIDIRECTIONAL FIBER RING



(57) Abstract: Transmissions over a unidirectional optical fiber coupling multiple nodes are compensated for temperature-induced effects. A round-trip delay time is determined for a signal sent from a first node to travel around the unidirectional optical fiber loop and be received back at the first node. That measured round-trip delay time is then used to account for temperature-induced effects on signal transmissions over the unidirectional optical fiber loop. This temperature compensation is particularly beneficial in applications that require a high level of timing accuracy.

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